Software Product Description

PRODUCT NAME: **HP SNA Printer Emulator for OpenVMS, Version 1.6**   **SPD 26.70.11**

This SPD describes *HP SNA Printer Emulator for OpenVMS*, which is available for the OpenVMS I64, OpenVMS Alpha and OpenVMS VAX platforms. All information applies to all platforms unless otherwise indicated.

DESCRIPTION

HP SNA Printer Emulator for OpenVMS (PrE) is an OpenVMS layered software product that allows suitably configured OpenVMS systems to receive printable data from IBM host-based applications. These applications will originally have been developed to produce output for an IBM 3287 printer in system mode that is connected to an IBM 3274 cluster controller in a Systems Network Architecture (SNA) networking environment. Access from the IBM system to OpenVMS systems is via one of the following SNA servers or gateways:

TCP/IP or DECnet Connections

- *HP SNA Peer Server*

- *HP SNA Domain Gateway*

- *HP SNA Access Server for Windows NT®*

- *HP SNA Server for OpenVMS Alpha*, a layered product that supports local access as well as TCP/IP and DECnet clients

DECnet Only Connections

- *HP DECnet SNA Gateway for Synchronous Transport*

- *HP DECnet SNA Gateway for Channel Transport*

- *HP SNA Server for OpenVMS VAX*, an OpenVMS VAX layered product that supports local access as well as remote DECnet clients

In an actual IBM 3287 environment, data transfer is one way (from host to printer) and generates hard copy. The PrE Access software will allow OpenVMS users to direct the received output either to be printed via the OpenVMS Print Symbiont or spooled to a disk file.

Features

The following is a summary of functions provided by PrE:

- PrE is configured and controlled via a HP Digital Command Language (DCL) style interface for ease of use.

- PrE can accept data in SNA Character String (SCS) format (LU type 1) and 3270 Data Stream format (LU type 3).

- PrE recognizes the following 3270 Data Stream orders:

   CR - Carriage Return
   DUP - Duplicate (converted to a semicolon)
   EM - End Message
   EUA - Erase Unprotected to Address
   FF - Form-feed
   FM - Field Mark (converted to an asterisk)
   GE - Graphics Escape (converted to a hyphen)
   NL - Newline
   PT - Program Tab
   RA - Repeat to Address
   SBA - Set Buffer Address
   SF - Start Fields

- PrE supports the following 3270 Data Stream commands:

   WRITE
   ERASE/WRITE

ERASE/WRITE ALTERNATE
ERASE ALL UNPROTECTED

- PrE will recognize the following SNA Character String orders:

    BS - Backspace
    CR - Carriage Return
    FF - Form-feed
    GE - Graphics Escape (converted to a hyphen)
    HT - Horizontal Tab
    IRS - Inter Record Separator
    LF - Linefeed
    NL - Newline
    SHF - Set Horizontal Format
    SVF - Set Vertical Format
    TRN - Transparency
    VCS - Vertical Channel Select
    VT - Vertical Tab

- PrE accepts but ignores the following SNA Character String orders:

    BEL - Bell
    ENP - Enable Presentation
    INP - Inhibit Presentation
    SLD - Set Line Density

- PrE supports the 3287 printer Program Attention (PA1 and PA2) keys and the CANCEL PRINT key using commands entered at the user interface.

- PrE does not support the Printer Authorization Matrix feature, and it does not emulate the 3287's REPRINT key function.

- PrE supports 1 to 255 copies of the print job to be printed.

- PrE supports a maximum of 250 sessions simultaneously.

- PrE supports the ability to submit a print job for another user. The print job will run exactly as if that user submitted the request. Accounting information is logged to that user's account. The user name string can be 1 to 12 characters in length and should be a valid user name on the system.

- PrE supports multiple form types. The form type is specified by using either a numeric value or a form name. These form types can refer to the print image width, length, or type of paper. Codes for these form types are installation defined.

- PrE supports the ability to change queue name, forms, number, number of copies, user name, and choice of deleting the output stream files without stopping the session.

- PrE supports the deletion of output files that are spooled to printers as a user-selectable setting.

- PrE provides an option to send an INIT SELF request to the IBM application.

- PrE supports LU security through the ability to specify a password for providing additional security to access the LU. This feature is supported in the *HP DECnet SNA Gateway for Synchronous Transport*, the *HP DECnet SNA Gateway for Channel Transport*, the *HP SNA Domain Gateway*, the *HP SNA Access Server for Windows NT*, and the *HP SNA Server for OpenVMS* products.

INSTALLATION

Only experienced customers should attempt installation of this product. Installation services from HP are recommended for all other customers. These services provide for installation of the software product by an experienced software specialist.

PREREQUISITE SUPPORT

For *HP SNA Printer Emulator for OpenVMS* to be supported by HP, the customer must also have a support agreement for the selected prerequisite SNA server or gateway.

HARDWARE REQUIREMENTS

Processors Supported

For information about supported processors, refer to the OpenVMS Operating System for I64, Alpha and VAX Software Product Description (SPD 82.35.xx and 25.01.xx).

Processors Not Supported

PrE is not supported on the following processors:

- VAX-11/785

- VAX-11/788

Disk Space Requirements (Block Cluster Size = 1)

Disk space required for installation:

OpenVMS I64	3820 blocks (1.91 MB)
OpenVMS Alpha	2119 blocks (1.06 MB)
OpenVMS VAX	1711 blocks (856 KB)

Disk space required for use (permanent):

OpenVMS I64	2868 blocks (1.434 MB)
OpenVMS Alpha	1037 blocks (520 KB)
OpenVMS VAX	574 blocks (290 KB)

These counts refer to the disk space required on the system disk. The sizes are approximations; actual sizes may vary depending on the user's system environment, configuration, and software options selected.

SOFTWARE REQUIREMENTS

OpenVMS Operating System for I64, Version 8.2-1 or 8.3 (SPD 82.35.xx)

OpenVMS Operating System for Alpha, Version 8.2 or 8.3 (SPD 82.35.xx)

OpenVMS Operating System for VAX, Version 7.3 (SPD 25.01)

Using *HP SNA Printer Emulator for OpenVMS* requires a networking product appropriate for the version of OpenVMS, plus one of the SNA server or gateway products listed below. Networking options include:

- TCP/IP Services for OpenVMS (SPD 46.46.xx)

- DECnet for OpenVMS (Phase IV, SPD 48.48.xx)

- DECnet-Plus (Phase V, SPD 50.45.xx for I64 and Alpha, SPD 25.03.xx for VAX)

Choose a networking option appropriate for the selected version of OpenVMS from the following table:

OpenVMS	TCP/IP	DECnet IV	DECnet V
8.3 (I64)	5.6	8.3	8.3
8.2-1 (I64)	5.5	8.2-1	8.2-1
8.3 (Alpha)	5.6	8.3	8.3
8.2 (Alpha)	5.5	8.2	8.2
7.3 (VAX)	5.3	7.3	7.3

Choose *one* of the following SNA server or gateway products:

- *HP DECnet SNA Gateway for Channel Support (SPD 29.76.xx)*

- *HP DECnet SNA Gateway for Synchronous Transport (SPD 25.C6.xx)*

- *HP SNA Domain Gateway (SPD 38.69.xx)*

- *HP SNA Peer Server (SPD 51.08.xx)*

- *HP SNA Server for OpenVMS Alpha (SPD 70.89.xx)*

- *HP SNA Server for OpenVMS VAX (SPD 27.01.xx)*

Cluster Environment

This layered product is fully supported when installed on any valid and licensed OpenVMS Cluster Software configurations without restrictions. The Hardware Requirements section details any special hardware required by this product.

OpenVMS Cluster Software configurations are described in the OpenVMS Cluster Software Product Description (SPD 29.78.xx) and include CI™, Ethernet, and Mixed Interconnect configurations.

OpenVMS Tailoring Classes

The following OpenVMS classes are required for full functionality of this layered product:

- OpenVMS Required Saveset

- Network Support

- Utilities

For more information on OpenVMS classes and tailoring, refer to the OpenVMS Operating System for I64, Alpha and VAX Software Product Description (SPD 82.35.xx and 25.01.xx).

OPTIONAL SOFTWARE

This HP OpenVMS SNA access routine has been qualified and tested to run over the Data Access Incorporated (DAI) Mainframe Gateway for OpenVMS (MGO). Questions and issues related to the DAI MGO product are managed by DAI and are not an HP OpenVMS obligation.

GROWTH CONSIDERATIONS

The minimum hardware and software requirements for any future version of this product may be different from the minimum requirements for the current version.

DISTRIBUTION MEDIA

This product is available as part of the OpenVMS I64, Alpha and VAX Software Product Libraries on CD-ROM.

The software documentation for this product is available as part of the OpenVMS I64, Alpha and VAX Online Documentation Libraries on CD-ROM. Documentation in hardcopy format can be ordered separately.

SOFTWARE LICENSING

License Management Facility Support

HP SNA Printer Emulator for OpenVMS supports the OpenVMS License Management Facility (LMF). This facility allocates license units as follows:

- For OpenVMS Integrity, each Per Core License (PCL) allows any number of individuals to use the product at the same time, with one PCL license required for each processor core running OpenVMS.

- For OpenVMS Alpha and VAX, the Unlimited license allows any number of individuals to use the product at the same time.

ORDERING INFORMATION

Licenses

License types vary by platform.

HP OpenVMS Integrity Licenses[1]	
SNA PrE Per Core License (PCL)[2]:	BA481AC

[1]Update licenses not offered; updates available through SW Updates Service.

[2]Order one PCL license for each active processor core running OpenVMS.

HP OpenVMS Alpha Licenses	
SNA PrE Unlimited Use License	QL-10TA*-AA[1]
SNA PrE Unlimited Use Update License	QL-10TA*-RA[1]

[1]Asterisk denotes system tier. E=workgroup tier, G=departmental tier, Q=enterprise tier.

HP OpenVMS VAX Licenses	
SNA PrE Unlimited Use License	QL-044A*-AA[1]
SNA PrE Unlimited Use Update License	QL-044A*-RA[1]

[1]Asterisk denotes system tier. B=workgroup tier, 2=departmental tier, 5=enterprise tier.

Media and Documentation

Product binary kits and online documentation are delivered on consolidated media libraries. Delivery model varies by platform.

HP OpenVMS Integrity Media and Online Documentation[1]	
Foundation Operating Environment	BA322AA#AJR
Enterprise Operating Environment	BA323AA#AJR
Mission Critical Operating Environment	BA324AA#AJR

[1]Product ships on Layered Products Library media included in all Operating Environment media kits, available with initial OpenVMS OE order.

HP OpenVMS Alpha Media and Online Documentation	
Software Layered Products Library Package[1]	QA-03XAA-H8
Software Layered Products and Operating System Library Package [1]	QA-5G98A-H8

[1]Quarterly Software Updates Service is available.

HP OpenVMS VAX Media and Online Documentation	
Software Layered Products Library Package[1]	QA-5G88A-H8
Software Layered Products and Operating System Library Package [1]	QA-YL48A-H8

[1]Quarterly Software Updates Service is available.

HP OpenVMS Documentation (Printed)	
SNA PrE Documentation	QL-044AA-GZ

HP OpenVMS Integrity SW Update[1]	
HP SNA Printer Emulator for OpenVMS	BA481AA

[1]For the OpenVMS Integrity platform, media updates are ordered by adding SW Updates Service to individual products. The above media product numbers must be pulled into an order if SW Updates Service is planned.

NOTE: If you are *adding* a layered product to an existing OpenVMS Integrity system and do not have the latest software revision on site, please contact your local Sales representative to request a Special Media kit.

SOFTWARE PRODUCT SERVICES

A variety of service options are available from HP. For more information, contact your HP account representative or distributor. Information is also available on www.hp.com/hps/software.

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